MODERN MICROSCOPY

It is no longer possible for the publications of the American Microscopical Society to give the space which was given in the early years of the society to technic of microscopy; nor is it necessary. The great majority of the members of the society are well versed in the possibilities of the miscroscope and in the methods preliminary to its use; and students in colleges and universities have regular courses given to the subject. Furthermore, the independent amateur can, for a dollar or two, secure any one of several books which will give more satisfactory service to the beginner than could possibly be given by a journal such as this.

The fourth edition of such a book has recently been issued. It contains in compact compass such instructions as will enable the beginner to select an outfit and to proceed with its use in an intelligent way.

Parts I and II, contained in earlier editions, are here enlarged and brought up to date. Part III is new, and will prove extraordinary value to the independent student.

Part I, consisting of five chapters, deals with such subjects as the microscope, its construction, the facts about the optical parts, illumination, accessory apparatus, principles to be held in mind in the choice of an outfit, and the like. Part II deals with the principles underlying the general technic of preparing materials for microscopic examination and the application of these principles to special cases. It comprises fifteen chapters. Part III, which is new, is really a series of condensed articles by experts on a number of topics of special interest to the amateur student. One can easily wish that other similar chapters on other groups of objects might have been added. These chapters are: Introduction to Use of the Petrological Microscope, by Frederic J. Cheshire; Rotifera, by C. F. Rousselet; Mites Found in Fresh Water, by C. D. Soar, one of our own honored members; Collection and Preparation of Foraminifera, by Arthur Earland; Collection and Preparation of Mosses and Liverworts, by T. H. Russell; Microscope and Nature Study, by W. M. Webb; The Microscopy of Foods, by Cuthbert Andrews. As might readily be expected, these chapters are somewhat uneven in quality. The writers are English and the book is written from the English

point of view. This does not interfere with its suggestiveness to American students, although it will necessitate certain adjustments in the chapters involving English fauna and flora.

Modern Microscopy. A Handbook for Beginners and Students. M. I. Cross and M. J. Cole. 4th Edition. Chicago, 1912. Chicago Medical Book Co. Price $2.00.

LABORATORY DIAGNOSIS

In Professor Todd's recently issued second edition of "Clinical Diagnosis" there is an extraordinary amount of material interesting not only to the physician but to the general student with the microscope. It is at once a clear and a concise presentation of the microscopic and chemical study of disease.

The general chapters relate to examination of sputum; of urine; of blood; of stomach contents; of feces; miscellaneous examination, including pus, mouth, eye, ear, skin, milk, etc.; animal parasites; bacteriological methods; preparation and use of vaccines; apparatus and reagents.

The mere enumeration of these chapters does little toward giving the reader a conception of the exceptional richness of the contents nor is it possible in the limits of this review to do more than suggest this. The revision contains all the essential matter of the first edition and introduces, among many other things: a discussion of the use of artificial light with the microscope; simple apparatus for photo-micrographic work; the antiformin method for detection of tubercle bacilli; detection and significance of albumin in the sputum; Tsuchiya's modification of Esbach's test for quantitative estimation of albumin in urine; Benedict's methods for determining quantity of sugar in urine; Wright and Kinnicutt's method of counting blood platelets; Harlow's blood stain; a simple technic for diagnosis of typhoid fever by blood cultures; the Wassermann reactions for testing syphilis, and Frothingham's impression method for the detection of Negri bodies in rabies.

The chapter on the animal parasites has been rewritten and enlarged; and a general chapter on bacteriological methods and one on preparation and use of vaccines have been added. The discussion of parasites in relation to human diseases takes on new significance in the light of recent progress in the study of such parasitic diseases as malaria, syphilis, relapsing fever, the numerous tropical trypanosome diseases, hookworm disease, and others. The book will prove,